

The following listing of claims will replace all prior versions, and listings, of claims in this application:

Claims 1-33 (Cancelled).

Claim 34 (Previously Presented) In a method of constructing a new building, the improvement comprising applying a film to a structure of said building, wherein the film has a water vapor diffusion resistance (s_d -value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 35 (Previously Presented) The method according to claim 34, which further comprises a carrier material attached to the film.

Claim 36 (Previously Presented) The method according to claim 35, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 37 (Previously Presented) The method according to claim 35, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 38 (Previously Presented) The method according to claim 35, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 39 (Previously Presented) The method according to claim 34, further comprising at least two layers of a carrier material, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 40 (Previously Presented) The method according to claim 34, wherein the film comprises polyamide.

Claim 41 (Previously Presented) The method according to claim 40, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 42 (Previously Presented) The method according to claim 41, wherein the polyamide is polyamide 6.

Claim 43 (Previously Presented) The method according to claim 34, wherein the film has a thickness of 10 μm to 2 mm.

Claim 44 (Previously Presented) The method according to claim 34, wherein the film has a thickness of 20 μm to 100 μm .

Claim 45 (Previously Presented) The method according to claim 34, wherein the film comprises a pattern.

Claim 46 (Previously Presented) The method according to claim 47, wherein the film comprises a printed color pattern.

Claim 47 (Previously Presented) The method according to claim 47, wherein the film is applied to a wall of said new building.

Claim 48 (Previously Presented) The method according to claim 47, wherein the film is applied to a roof of said new building.

Claim 49 (Previously Presented) The method according to claim 47, wherein the film is applied to a roof and a wall of said building.

Claim 50 (Previously Presented) In a method of renovating a building, the improvement comprising applying a film to a structure of said building, wherein the film has a water vapor diffusion resistance (s_d -value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 51 (Previously Presented) The method according to claim 50, which further comprises a carrier material attached to the film.

Claim 52 (Previously Presented) The method according to claim 51, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 53 (Previously Presented) The method according to claim 51, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 54 (Previously Presented) The method according to claim 51, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 55 (Previously Presented) The method according to claim 50, further comprising at least two layers of a carrier material, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 56 (Previously Presented) The method according to claim 50, wherein the film comprises polyamide.

Claim 57 (Previously Presented) The method according to claim 56, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 58 (Previously Presented) The method according to claim 57, wherein the polyamide is polyamide 6.

Claim 59 (Previously Presented) The method according to claim 50, wherein the film component has a thickness of 10 μm to 2 mm.

Claim 60 (Previously Presented) The method according to claim 50, wherein the film component has a thickness of 20 μm to 100 μm .

Claim 61 (Previously Presented) The method according to claim 50, wherein the film comprises a pattern.

Claim 62 (Previously Presented) The method according to claim 50, wherein the film comprises a printed color pattern.

Claim 63 (Previously Presented) The method according to claim 50, wherein the film is applied to a wall of said new building.

Claim 64 (Previously Presented) The method according to claim 50, wherein the film is applied to a roof of said new building.

Claim 65 (Previously Presented) The method according to claim 50, wherein the film is applied to a roof and a wall of said building.

Claim 66 (New): A method for providing a vapor barrier to a building, comprising installing a film on at least a part of the building, wherein the film has a water vapor diffusion resistance (s_d -value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 67 (New) The method of claim 66, wherein the film is attached to a carrier material.

Claim 68 (New) The method of Claim 67, wherein the carrier material is a thermal insulation.

Claim 69 (New) The method of claim 67, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 70 (New) The method of claim 67, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 71 (New) The method of claim 70, wherein the carrier material is gypsum board.

Claim 72 (New) The method of claim 70, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 73 (New) The method of claim 66, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 74 (New) The method of claim 73, wherein at least one layer of carrier material is a thermal insulation.

Claim 75 (New) The method of claim 73, wherein at least one layer of the carrier material is gypsum board.

Claim 76 (New) The method of claim 66, wherein the film comprises polyamide.

Claim 77 (New) The method of claim 76, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 78 (New) The method of claim 77, wherein the polyamide is polyamide 6.

Claim 79 (New) The method of claim 66, wherein the film has a thickness of 10 μm to 2 mm.

Claim 80 (New) The method of claim 66, wherein the film has a thickness of 20 μm to 100 μm .

Claim 81 (New) The method of claim 66, wherein the film is attached to an inner wall surface of the building.

Claim 82 (New) The method of claim 66, wherein the installing the film comprises spraying or painting the film onto the building.

Claim 83 (New) The method of claim 66, wherein the film is a formed film.

Claim 84 (New) The method of claim 83, wherein the film comprises polyamide.

Claim 85 (New) The method of claim 84, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 86 (New) The method of claim 85, wherein the polyamide is polyamide 6.

Claim 87 The method of claim 83, wherein the thickness of the formed film is 10 μm to 2 mm.

Claim 88 (New) The method of claim 83, wherein the thickness of the formed film is 20 μm to 100 μm .

Claim 89 (New) The method of claim 53, wherein the formed film is attached to a carrier material.

Claim 90 (New) The method of claim 89, wherein the carrier material is a thermal insulation.

Claim 91 (New) The method of claim 89, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 92 (New) The method of claim 91, wherein the carrier material is gypsum board.

Claim 93 (New) The method of claim 92, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 94 (New) The method of claim 83, wherein the formed film is sandwiched between a carrier material and the thermal insulation, the carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 95 (New) The method of claim 94, wherein the carrier material is a thermal insulation.

Claim 96 (New) The method of claim 94, wherein at least one layer of carrier material is gypsum board.

Claim 97 (New) The method of claim 83, wherein the formed film comprises a pattern.

Claim 98 (New) The method of claim 83, wherein the formed film comprises a printed color pattern.

Claim 99 (New) The method of claim 66, wherein the film is installed onto a wall structure of the building.

Claim 100 (New) The method of claim 66, wherein the film is installed onto a roof structure of the building.

Claim 101 (New) The method of claim 100, wherein the film is installed such that it covers at least two rafters of the roof structure.

Claim 102 (New) The method of claim 66, wherein the film is installed onto a wall structure and a roof structure of the building.

Claim 103 (New) The method of claim 83, wherein the formed film is installed onto a wall structure of the building.

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Claim 104 (New) The method of claim 83 wherein the formed film is installed onto a roof structure of the building.

Claim 105 (New) The method of claim 104, wherein the formed film is installed such that it covers at least two rafters of the roof structure.

Claim 106 (New) The method of claim 83, wherein the formed film is installed onto a wall structure and a roof structure of the building.